

I claim:

1. A safety bus system comprising:
at least one bus-capable module;
at least one bus controller ; and
at least one bus line interconnecting the at least one bus-capable module and the at least one bus controller,
wherein at least one safety function can be implemented by the safety bus system, and the at least one safety function may be performed essentially simultaneously with at least one control function and/or at least one measurement function.
2. The safety bus system of claim 1, wherein at least one analog signal may be processed by means of the at least one safety function and/or the at least one control function and/or the at least one measurement function.
3. The safety bus system of claim 1, wherein at least one digital signal may be processed by means of the at least one safety function and/or the at least one control function and/or the at least one measurement function.
4. The safety bus system of claim 1, wherein at least one of the at least one safety functions is a safety window, an enclosure switch, or an emergency stop function.
5. The safety bus system of claim 1, wherein at least one of the at least one bus-capable modules includes at least one actuator and/or at least one sensor and/or at least one display.
6. The safety bus system of claim 1, wherein at least one of the at least one bus-capable modules includes at least one commanding means.

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7. The safety bus system of claim 6, wherein the at least one commanding means is a switch, button, emergency off switch, or sensor.
8. The safety bus system of claim 1, wherein at least one of the at least one bus-capable modules includes at least one signaling means.
9. The safety bus system of claim 8, wherein the at least one signaling means produces at least one optical signal and/or at least one acoustic signal and/or at least one mechanical signal.
10. The safety bus system of claim 1, wherein at least one of the at least one bus-capable modules includes at least one actuator.
11. The safety bus system of claim 10, wherein the at least one actuator is electromechanical, electromagnetic, piezoelectric, pneumatic, or hydraulic.
12. The safety bus system of claim 1, wherein the at least one bus line is electrical, optical, or radio-controlled.
13. The safety bus system of claim 1, wherein the at least one bus line includes at least one signal line.
14. A tableting machine comprising a safety bus system according to claim 1.